

Abstract

For medical fluids, two-part containers are used which consist of an inner container and an outer container which is impenetrable to diffusion. The inner container collapses when the fluid is removed.

For the purposes of pressure compensation between the gaseous space, disposed between the inner- and outer containers, and the surroundings of the two-part container, a pressure compensation device is required by means of which at the same time the loss of fluid through diffusion from the collapsible inner container is kept as little as possible. To that end, at least one channel is used which communicates the gas-filled intermediate space with the surroundings of the two-part container. The time constant for compensation of a pressure differential of a few millibars is within the region of quite a few hours. It is obtained by selecting the length of the channel and channel cross-section. The, at least one, channel can be produced individually, or a plurality of channels can be present in the form of pores in an open-pore sintered material or in a permeable membrane.

The pressure compensation device permits storage of the two-part container for many years, and use for many weeks as fluid is being removed in portion-wise manner. During these times, the quantity of fluid in the inner container, or the concentration thereof, changes substantially less than with the use of a known two-part container.

((Figure 6))